

DEPARTMENT OF TRANSPORTATION**DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 1.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-015030**Date Inspected:** 21-Jun-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1530**Contractor:** American Bridge/Fluor Enterprises, a JV**Location:** Job Site**CWI Name:** See Below**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Orthotropic Box Girders (OBG)**Summary of Items Observed:**

Quality Assurance inspector (QA) Michael Foerder was at the American Bridge/Flour (ABF) job site at Yerba Buena Island in California between the times noted above in order to monitor Quality Control functions and the in process work being performed by ABF personnel. The following items were observed:

1. OBG Field Splice 3E/4E Face D (Outside) FCAW
2. OBG Field Splice 4E/5E Face C (Inside) FCAW
3. OBG Field Splice 4E/5E Face D (Outside) Backgouge

Field Splice 3E/4E Face D (Outside) FCAW

The QA inspector periodically observed the in process Flux Cored Arc Welding (FCAW-G) being performed in the 4G overhead position by ABF welding personnel Mitch Sittinger for the South ½ of face D. QC inspector Jim Cunningham was noted to be present in order to monitor the progress and ensure the welding parameters were within the established Welding Procedure Specification (WPS) noted as ABF-WPS-D1.5-3040B-4. At this time the welder and the helper are in the process of performing grinding operations in order to prepare several areas for welding. These areas have been identified by the welder and the QC inspector for grinding/blending and/or filling for weld layering purposes. The work continued throughout the QA inspector's shift, was not completed on this date and appeared to be progressing in general conformance with the contract documents. See digital photo included in the body of this report for general information.

Field Splice 4E/5E Face C (Inside) FCAW

The QA inspector periodically observed the in process Flux Cored Arc Welding (FCAW-G) being performed by

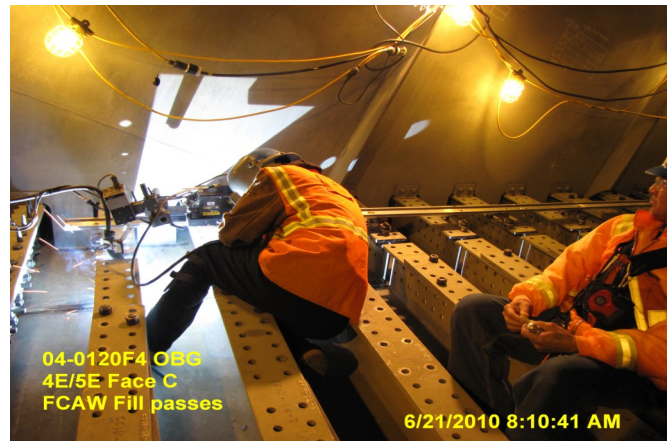
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ABF welding personnel Song Tao Huang between Y locations originating at Y location 5000mm from the longitudinal diaphragm. The welder is in the process of placing the fill passes at this time with approximately 80% being completed at the start of the shift. QC inspector Bernard Docena was noted to be present in order to monitor the progress and ensure the welding was within the established Welding Procedure Specification (WPS) noted as ABF-WPS-D1.5-3042B-1 and supporting Procedure Qualification Records (PQR). Prior to initiating the welding at this location the QC inspector observed the preheat temperature was not sufficient due to an equipment malfunction. The QC inspector immediately informed the welder and the welding foreman who rectified the equipment and the welder applied localized heating to bring the area into conformance. The preheat and interpass temperature was then verified by the QC and QA inspector to be greater than 93° C and the parameters were verified to be 252 amps, 23.8 volts with a measured travel speed of 310mm/min. The work progressed throughout the shift and appeared to be in general conformance with the contract documents. See digital photo included in the body of this report for general information.

Field Splice 4E/5E Face D (Outside) Backgouge

The QA inspector noted and periodically observed ABF welding operators Bryce Howell and Mike Maday performing the backgouging and grinding operations for face D on the second side (Outside). The welding operators continued setting the equipment up and periodically performing the operation throughout the shift. QC inspector Jim Cunningham was noted to be in the vicinity in order to monitor the progression of work, perform in process visual inspection and ensure the work was being performed in general conformance with the contract documents. The work was not completed on this date and appeared to be progressing in general conformance with the contract documents.



Summary of Conversations:

No significant conversations held on this date for this contract.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mohammad Fatemi (916)813-3677, who represents the Office of Structural Materials for your project.

Inspected By: Foerder, Mike

Quality Assurance Inspector

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Reviewed By: Levell,Bill

QA Reviewer